ATTORNEY DOCKET NO. 17104.0001U2 PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| In re Application of: |) | |
|------------------------------------|---|-------------------------|
| |) | |
| Lasken et al. |) | Art Unit: 1637 |
| |) | |
| Application No. 09/920,571 |) | Examiner: T. Strzelecka |
| |) | |
| Filing Date: July 31, 2001 |) | Confirmation No. 1637 |
| |) | |
| For: MULTIPLY-PRIMED AMPLIFICATION |) | |
| OF NUCLEIC ACID SEQUENCES |) | |

COMMUNICATION

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 NEEDLE & ROSENBERG, P.C. Customer Number 23859

Sir:

Attached hereto is a Revocation and Substitute Power of Attorney executed on behalf of QIAGEN GmbH, the owner of the above-identified application.

Respectfully submitted,

NEEDLE & ROSENBERG, P.C.

Robert A. Hodge

Registration No. 41,074

NEEDLE & ROSENBERG, P.C. Customer Number 23859 (678) 420-9300 (678) 420-9301 (fax)



ATTORNEY DOCKET NO. 17104.0001U2 PATENT

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8

I hereby certify that this correspondence, including any items indicated as attached or included, is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated below.

Robert A. Hodges

Date



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REVOCATION OF PRIOR POWER OF ATTORNEY, APPOINTMENT OF NEW POWER OF ATTORNEY, AND STATEMENT UNDER 37 C.F.R. § 3.73(b)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 NEEDLE & ROSENBERG, P.C. Customer Number 23859

Sir:

STATEMENT UNDER 3.73(b)

QIAGEN GmbH, a corporation of Germany states that it is the Assignee of the entire right, title and interest in the patent application identified above as evidenced by the following chain of title:

1. From: Roger S. Lasken and Frank B. Dean

To: Molecular Staging, Inc.

Recorded at Reel 011346/Frame 0380

2. From: John Nelson

To: Molecular Staging, Inc.

Recorded at Reel 011357/Frame 0267

3. From: Molecular Staging, Inc.

To: QIAGEN GmbH

A copy of which is attached hereto.

REVOCATION OF PRIOR POWER OF ATTORNEY

As a representative authorized to act on behalf of QIAGEN GmbH hereby revoke all previous Powers of Attorney previously given.

NEW POWER OF ATTORNEY

The following attorneys/agents are hereby appointed to represent the above-identified Assignee in connection with all matters pertaining to the above-referenced application, with full power of substitution, association and revocation, to prosecute said application and to transact all business in the U.S. Patent and Trademark Office connected therewith.

The attorneys/agents associated with Customer No. 23859

Address all telephone calls to Robert A. Hodges, Esq. at (678) 420-9300.

Address all correspondence to the address of record for the following Customer Number:

QIAGEN GmbH

Customer No. 23859

The undersigned (whose title is supplied below) is authorized to act on behalf of the Assignee.

| - | Vishes |
|--------|--|
| By: | Dr. Volker Kühn |
| Title: | Director Intellectual Property & Licensing |
| Title: | |
| Date: | 1 9. JUL. 2005 |

EXECUTION COPY

ASSIGNMENT OF PATENTS

WHEREAS, Molecular Staging Inc. (hereafter "Assignor"), a Delaware corporation having a principal place of business at 300 George Street, New Haven, Connecticut 06511, is the owner of the United States patents (the "Patents") and the patent applications (the "Patent Applications") set forth on Schedule A attached hereto, and the inventions described in and claimed therein (the "Inventions"); and,

WHEREAS, QIAGEN GmbH (hereafter "Assignee"), a German Gesellschaft mit beschraenkter Haftung having a place of business at Qiagen Str. 1, Hilden, 40724 Germany, is desirous of acquiring the entire right, title and interest of Assignor in and to said Patents, Patent Applications and Inventions.

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, BE IT KNOWN, that for good and valuable consideration, the receipt of which is hereby acknowledged, Assignor has sold, assigned, transferred and conveyed and by these presents does hereby sell, assign, transfer and convey, unto said Assignee, its successors and assigns, its entire right, title and interest in and to the Patents and Patent Applications as set forth and described in Schedule A attached hereto, and the Inventions, and all divisions, continuations, continuations-in-part and renewals of such Patents and Patent Applications and all Patents of the United States which may be granted on such Patent Applications, and Inventions, and all reissues, re-examinations and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for an invention described in any of the foregoing Patents or Patent Applications in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said Patent Applications under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for the Inventions in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; together with all claims for damages by reason of past infringement, with the right to sue for, and collect the same for the use of Assignee, its successors and assigns, as well as all of the rights incident to such ownership, including but not limited to manufacturing, use, sale and importation of the products and/or methods evidenced by the Patents and Patent Applications.

Assignor hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States, and any official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the Assignee, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

FAX QINGEN GMBH IP LICENSING +++ NEEDLE ROSENBERG HODGES

Assignor hereby covenants and agrees that it has full right to convey the entire interest herein assigned, and that it has not executed, and will not execute, any agreement in conflict

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PAGE 4/9 RightFax

This Assignment is effective as of this 24th day of September, 2004.

N WITNESS WHEREOF, Assignor has caused these presents to be signed by a duly arrigerized officer.

MOLECULAR STAGING INC., Assignor

Name:

TV::::esses:

Signature:

BEST AVAILABLE COPY

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SCHEDULE A

| Title | Country | Serial # | Patent # |
|---|------------|-------------|---------------------------------------|
| Signal Amplification with Lollipop | US | 09/897,259 | 6,686,157 |
| Probes | | | |
| Protein Expression Profiling | us | 09/597,836 | 6,531,283 |
| Process for allele discrimination | US | 09/827,289 | 6,777,183 |
| using primer extension | | | 0.004.407 |
| Polyprimed amplification of nucleic | US | 09/577,444 | 6,291,187 |
| acid sequences | 116 | 09/897,665 | 6,670,126 |
| | US | 09/803,713 | 6,573,051 |
| Open circle probes with | US | 09/803,713 | 0,070,001 |
| intramolecular stem structures Nucleic acid amplification | บร | 09/982,212 | 6,617,137 |
| Multiply primed amplification of | US | 09/605,192 | 6,323,009 |
| nucleic acid sequences | - - | | |
| Generation of single stranded | US | 09/723685 | 6,498,023 |
| circular DNA from linear self | | | |
| Detection and amplification of RNA | US | 09/547,757 | 6,368,801 |
| using target-mediated ligation of | | | |
| DNA by RNA ligase | | 09/910372 | 6.635,425 |
| 5' Thiophosphate-directed ligation of | US | 09/910372 | 0,030,420 |
| oligonucleotides and use in | | | |
| detection of single nucleotide polymorphisms | • | | |
| polymorphisms | us | 10/465,759 | 6,811,986 |
| Methods for selectively isolating | US | 09/398,216 | 6,235,502 |
| DNA using rolling circle amplification | 00 | 00/000,2:0 | |
| DIAY result towned curre surphyserrous | US | 09/818,927 | 6,576,448 |
| Methods for reducing the complexity | US | 09/398,217 | 6,287,825 |
| of DNA sequences | · | | |
| 1 | US | 09/562331 | 6,346,399 |
| | US | 09/562332 | 6,372,434 |
| Methods for Identifying DNA | บร | 09/398215 | 6,150,112 |
| sequences for use in comparison of | | | |
| DNA samples by their lack of | | 1 | |
| polymorphism | | | · · · · · · · · · · · · · · · · · · · |
| | | 1 | |
| Universal RCA | US | 10/405,822 | |
| | | | |
| Suppresion of cross-reactivity and | US | 09/931,736 | |
| non-specific binding of antibodies by | } | 1 | |
| Protein A | US/CON | 10/931,015 | |
| | | | |
| Signal Amplification with Lollipop | JP | 2002-508032 | |

| Probes | | | - |
|---|--------|------------------------|---|
| Flobes | EP | 01950759.9 | |
| | CA | 2411794 | |
| , | AU | 2001-071722 | |
| Rolling circle amplification of RNA | US | 10/335,573 | |
| - | PCT | PCT/US03/3943 0 | |
| Real time detection of rolling circle amplification products | บร | 10/325,665 | |
| Protein Expression Profiling | US/CON | 10/341,287 | |
| | AU | 2001-269944 | |
| | CA | 2,411,838 | |
| | EP | 01948505.1 | |
| | JP | 2002-503102 | |
| | CN | 1811542 | |
| · | TW | 90114960 | |
| } | SĢ | 200207285-8 | |
| | WO | PCT/US01/196 57 | |
| Process for enhanced molecular target detection using tayered roling circle amplification | US | 10/177,629 | |
| Open circle probes with intramolecular stem structures | US/DIV | 10/404,944 | |
| Nucleic acid amplification | US | 09/977,868 | |
| | wo | PCT / US 02 / 33244 | |
| | CA | 2463933 | |
| · | AU | 2002362874 | |
| | EP | 02801776.2 | |
| | US/CIP | 10/272,465 | |
| | US/CIP | 10/327,602 | |

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US

Conjugates of reduced antibodies

and biomolecules

10/143,517

| Signal Amplification with Lollipop | WO | PCT/US01/20933 | |
|---|----|--------------------|--|
| Probes | US | 60/215,639 | |
| Process for enhanced molecular target detection using layered rolling circle amplification | US | 60/299,345 | |
| Process for allele discrimination using primer extension | US | 60/194,843 | |
| asing printer according | WO | PCT/US01/111 51 | |
| ļ | JP | 2001-575244 | |
| <u> </u> | CA | 2,405,687 | |
| ļ — | AU | 2001/251359 | |
| Polyprimed amplification of nucleic acid sequences | US | 60/204,057 | |
| Phosphorothioate-directed ligation of oligonucleotides | US | 60/259,918 | |
| Open circle probes with intramolecular stem structures | TW | 91102150 | |
| Generation of single stranded circular DNA from linear self | US | 60/168,511 | |
| : · | JP | 2001542579 | |
| | CA | 2,360,342 | |
| | AU | 18040/01 | |
| Detection and amplification of RNA using target-mediated ligation of DNA by RNA ligase | JP | 2001-577404 | |
| | EP | 01928481.9 | |
| [| CA | 2,405,456 | |
| ľ | AU | 55331/01 | |
| | wo | PCT/US01/119 47 | |
| Conjugates of reduced antibodies and biomolecules | US | 60/299,671 | |
| 5' Thiophosphate-directed ligation of oligonucleotides and use in detection of single nucleotide polymorphisms | WO | PCT/US02/000 05 | |
| F, | CA | 2,433,634 | |
| Ι Γ | AU | 2002/239809 | |
| Methods for selectively isolating DNA using rolling circle amplification | บร | 60/100,996 | |
| | US | 09/820,356 | |
| Methods for reducing the complexity of DNA sequences | US | 60/100,999 | |

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|-----|-----|----|------|----|-----------|--------------|--------|-----------|--------|
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| Methods for identifying DNA sequences for use in comparison of DNA samples by their lack of polymorphism | US | 60/100,935 | |
|--|--------|--------------------|-----------|
| Methods for idenfitying genes associated with diseases of specific phenotypes | US | 60/243407 | |
| Multiply primed amplification of nucleic acid sequences | WO | PCT/US01/202 17 | |
| Method of Amplification of a circularised nucleic acid probe | US | 09/460,078 | 6,830,884 |
| Method of Amplification of a circularised nucleic acid probe | US/CON | 10/917,580 | |
| Method of Amplification of a circularised nucleic acid probe | US | 60/112,370 | |
| | AU | 27819/00 | |
| · | CA | 2,394,800 | |
| | JP | 2000-588388 | |
| | WO | PCT/AU99/011 10 | |
| Cascade rolling circle DNA amplification | US | 09/356,843 | |